

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-030068**Date Inspected:** 24-Sep-2013**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Bernie Docena**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** SAS Tower**Summary of Items Observed:**

Caltrans Quality Assurance Inspector (QA) Joe Adame arrived at the American Bridge/Fluor (ABF) JV job site between the times noted above in order to monitor ABF Quality Control activities and the in process work being performed by ABF production personnel. The following items were observed:

ESW Repair Excavation Welding

RWR-201308-002

ESW N-043, Location "P"-Face B:

The QA Inspector observed ABF welder Donald Plumb (WID-0891) performing Shield Metal Arc Welding (SMAW) on the repair excavation of Electroslag Weld (ESW) "P" Face B @ Original Y-1330mm. Location of the repair is as follows:

Repair excavation length: (Y-1180mm~1480mm) L=300mm, W=63mm, D=36mm

Prior to welding, Mr. Plumb was observed preheating the weld to over 300° Fahrenheit using the Miller ProHeat 35 with heat induction blankets and a propylene torch. The welder was using 4.0mm diameter electrode (E7018-1 HR4) per ABF Welding Procedure Specification (WPS) ABF-WPS-D15-1000-Repair Rev.3. The welding process in use was the SMAW process. ABF QC Inspector Bernie Docena performed welding parameters verifications and checked preheat at random intervals throughout the shift. The QA Inspector also verified the preheat with a 300° F. temperature indicator. On this date the weld repair at this location was completed. Mr. Plumb completed the rest of the shift grinding the weld reinforcement of the repair and applying the postheat with Miller Proheat 35 as instructed per RWR-201308-002. The QC Inspector stated that Mr. Plumb will move to another ESW weld to perform additional repairs. The welding observed appeared to be in compliance with the WPS noted above.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

ESW Repair Excavation Welding

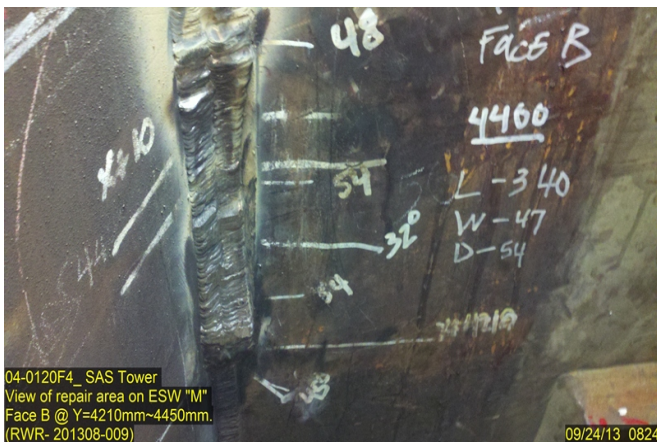
RWR-201308-009

ESW W-042, Location "M"-Face B:

The QA Inspector observed ABF welder Mike Jimenez (WID-4671) performing Shield Metal Arc Welding (SMAW) on the repair excavation of Electroslag Weld (ESW) "M" Face B @ Original Y-4400mm. Location of the repair is as follows:

Repair excavation (Y=-4210mm~4450mm) L=340mm, W=47mm, D=54mm.

Prior to welding, Mr. Jimenez was observed preheating the weld to over 300° Fahrenheit using the Miller ProHeat 35 with heat induction blankets and a propylene torch. The QA Inspector observed Mr. Jimenez using a temperature indicator to check the preheat. The welder was using 4.0mm diameter electrode (E7018-1 HR4) per ABF Welding Procedure Specification (WPS) ABF-WPS-D15-1000-Repair Rev.3. The welding process in use was the SMAW process. ABF QC Inspector Bernie Docena performed welding parameters verifications at random intervals throughout the shift and informed the QA Inspector that the average welding amps were at -180. On this date the weld repair at this location was completed and Mr. Jimenez was observed grinding the weld reinforcement and applying the postheat with Miller Proheat 35 as instructed per RWR-201308-009. Mr. Jimenez will continue with repairs on ESW "M" on 9-25-13. The welding observed appeared to be in compliance with the WPS noted above.



Summary of Conversations:

Only general conversations with ABF/JV QC NDT personnel relevant to work and testing performed during this shift.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

Inspected By: Adame,Joe

Quality Assurance Inspector

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Reviewed By: Riley, Ken

QA Reviewer